

2 - An institutional mapping of Urban Local Bodies through the lens of Sanitation and Solid Waste Management Services
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#### 1. BACKGROUND

Cities have been regarded as engines of economic growth and the top ten cities together contribute about 1.26 trillion USD (Purchasing Power Parity [PPP]) to India's Gross Domestic Product (GDP) of 9.49 trillion USD (PPP). However, for cities to drive growth and sustain their productivity, urban services like water supply, sanitation, solid waste management, transport, communication, clean energy, and housing become very critical. India has 53 cities, each with a population of one million and above; together, they constitute about 42% of India's urban population. The number is likely to go up to 68 cities by 2021.

Management of urban waste (including both sanitation and solid waste) is one of the important urban services that has a bearing on urban productivity and sustainability in the long run. Sustainable Development Goals (SDGs) 6 and 11 also emphasise the importance of urban sanitation and Solid Waste Management (SWM) services. Successive Finance Commissions (FCs) have taken cognizance of the importance of urban services including SWM and sanitation. The terms of reference for 15th FC also highlighted the need for improving the quality of basic services, including solid and liquid waste management through incentivisation of Urban Local Bodies (ULBs). It has also

stressed the need for focusing on behavioural change communication to achieve the objective of ending open defecation and to put an end to the inhuman practice of manual scavenging<sup>1</sup> by putting proper sewerage systems in place. The Integrated Low-Cost Sanitation (ILCS) Scheme which facilitates building of low-cost sanitation units and the Self Employment Scheme for Rehabilitation of Manual Scavengers (SRMS), which focuses on rehabilitation of manual scavengers by providing cash assistance and capital subsidy for entrepreneurial activity, are very important schemes in this regard.

It is in this context that we present this Policy Brief, which is based on a research carried out in the six states of Maharashtra, Andhra Pradesh, Telangana, Tamil Nadu (TN), Karnataka and Kerala, with a larger focus on Karnataka and TN. The research especially focused on (i) the role of ULBs and other institutions including state governments and parastatal bodies, and (ii) aspects of financing and governance of SWM services. The study is based on (i) a review of the devolution of functions, functionaries and funds under the 12th schedule to ULBs, and (ii) an in-depth institutional mapping of two ULBs, one in Karnataka (Doddaballapura) and one in TN (Hosur), for a deeper understanding of their finances along with provisioning of

<sup>&</sup>lt;sup>1</sup> The Employment of Manual Scavengers and Construction of Dry Latrines (Prohibition) Act, 1993 was amended in 2013 to form the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act.

sanitation and SWM services. Both these ULBs are located close to the city of Bengaluru (Bangalore), and this has implications for the functioning of these ULBs that need to be kept in mind.

### 2. MAJOR FEATURES AND ISSUES

#### A. Urban Local Body Governance

#### 1. Multiplicity of agencies and absolute control of state government

The 74th Constitutional Amendment provided ULBs the much-required legal status as local self-governments. The 12th schedule of the Indian Constitution lists the 18 functions that may be devolved to ULBs by state governments. However, the functioning of specialised parastatal bodies<sup>2</sup> and Special Purpose Vehicles (SPVs)<sup>3</sup> has resulted in ULBs being largely confined to the four core urban services of water supply, street lighting or public safety, municipal roads, and sanitation and SWM. Urban local bodies also implement urban development schemes4 aimed at improving urban infrastructure and services even though they have very little to no say in designing them.

In Karnataka, ULBs are governed by Karnataka Municipalities Act 1964 and Karnataka Municipal Corporations Act 1976. The state government wields absolute power over the functioning of ULBs by way of recruitment (hire and transfer) of officials, regulating the rates of taxes and fees, control of information and data, provisioning of grant/devolution fund upon the recommendations of the State Finance Commission (SFC), and creating the capital assets/provisioning of urban services through the specialised agencies which are directly controlled by it. In Karnataka, ULBs in the state are categorised into four different kinds based on population The Department of Urban Development supervises the ULBs and parastatal bodies. These parastatal bodies with their own governing boards do not have elected representatives from ULBs and are accountable only to the state government.

The function of public health, sanitation, conservancy and SWM is considered to be obligatory on the part of ULBs in Karnataka, but the state government also has the powers for monitoring the proper functioning of all ULBs. The term of office of the mayor and deputy mayor in the

<sup>&</sup>lt;sup>2</sup> Urban Water Supply and Drainage Board, Urban Infrastructure Development and Finance Corporation, Slum Development Board are the urban development authorities that are funded by state and have superior powers in urban management in comparison to Urban Local Bodies (ULBs).

<sup>&</sup>lt;sup>3</sup> Special Purpose Vehicles (SPVs) like the Smart City Mission have overarching objectives of urban development and are funded by the state/union government

<sup>&</sup>lt;sup>4</sup> Jawaharlal Nehru National Urban Renewal Mission (JNNURM), Atal Mission Rejuvenation of Urban Towns (AMRUT), and Heritage City Development and Augmentation Yojana (HRIDAY) have been implemented to improve the provision of urban services and reduce the deficits in infrastructure. Basic Services for Urban Poor (BSUP), National Urban Livelihood Mission (NULM), and Housing for All have been targeted to enhance the quality of urban services provided to poor.

case of city corporations is limited to only one year from the date of election, which is too short for carrying out effective reforms. The state, however, has a wellestablished municipal cadre. The state government directly releases grants to ULBs to implement the devolved functions on the basis of the recommendations of SFC. While the power to collect certain taxes is vested with the ULBs, powers pertaining to the rates and revisions thereof, procedure of collection, method of assessment, exemptions, concessions, etc., are all vested with the state government. The own non-tax revenue of ULBs comprise of fee for sanction of plans/mutations, water charges, etc. Thus, ULBs have limited autonomy in generating own revenue and are largely dependent on fiscal transfers from state.

In TN, the state ULBs are governed by Tamil Nadu District Municipalities Act, 1920 which is amended after 74th constitution amendment with respect to the powers and responsibilities and to implement schemes for economic development and social justice including those in relation to the matters listed in the 12th schedule of the constitution. Tamil Nadu (TN) has three kinds of ULBs, defined on the basis of annual income. The state administration in TN manages the urban governance, infrastructure and development domains through two key departments, namely Municipal Administration and Water Supply (MAWS) Department and Housing and Urban Development Department (HUDD). Tamil Nadu also has a

well-established municipal cadre. In 1970, TN adopted a series of rules for various municipal services, which provincialised many cadres of municipal staff, bringing them within a statutory framework for recruitment, grades and salaries, and regulating transfers and promotions.

The major sources of finances for ULBs in TN are own revenues that include tax and non-tax revenues and assigned revenues that include entertainment tax, surcharge on stamp duty and local cess/local cess surcharge apart from grants and loans from the government. Though there are a range of taxes that the ULB can derive its revenue from, property tax and professional tax are the two major sources. A major portion of income also comes from water charges, dangerous & offensive license fees, building fees, development charges, lease rental, and other fees and fines. People from different economic strata are charged at different rates for the same level of services such as street lighting and collection of recyclable waste from garbage scavenging.

Tamil Nadu has created an Infrastructure Gap-Filling Fund and an Operation and Maintenance Gap-Filling Fund in order to fund the creation of new infrastructure by local bodies as well as their regular maintenance. The current allocation is 3% towards the Infrastructure Gap-Filling Fund and 2% for the Operation and Maintenance Gap Filling Fund from out of the share of SFC grants allocated to each tier of ULB (Corporation, Municipalities and Town Panchayats). These two funds have provided the much-needed scope for

local bodies to maintain their assets as well as meet certain operational expenses.

2. Complex ecosystem of water, sanitation and SWM and lack of autonomy for ULBs in managing these services.

Rapid urbanisation, especially pushed by industrialisation caused by closeness to cities, as experienced by both Doddaballapura in Karnataka and Hosur

in TN (both located close to Bengaluru; see Table 1), has also led to an emergence of major challenges in terms of severe pollution of the ground water and nearby water bodies and in waste management, leading to serious issues in terms of managing the processes as well as workers for services related delivery of water, sanitation and SWM.

Table 1: Brief Profile of the Urban Local Bodies

Parameter	Doddaballapura	Hosur
Population (2011 Census)	93,105	2,45,354
Geographical Area (sq. kms)	18	72.41
Number of Households	22,365	82,220
Water supply (litre per capita per day)	63	90
Length of sewer system (kms)	122	Does not exist
Total Solid waste generated (tonnes per day)	42	72
Solid Waste Processed (%)	54%	89%

Figures 1 to 4 explain the sanitation and SWM systems that exist in Doddaballapura City Municipal Council (CMC) and Hosur City Municipal Corporation (CMC) for managing these services, as understood by the Centre for Budget and Policy Studies (CBPS) team through consultations and interviews. While major capital assets were created by the Karnataka Urban Infrastructure and Finance Development Corporation (KUIDFC)– a parastatal body, its Operation and Maintenance (O&M) is the sole responsibility of the ULB. It is also interesting to note that while the ULB has taken on the responsibility of supervising the potentially hazardous cleaning of

sewers and septic tanks, the actual work is carried out only by labour that is outsourced from private agencies. The sewage transported through the Underground Drainage (UGD) and faecal sludge from emptying the pits is treated in a nearby Sewage Treatment Plant (STP) that is fully owned and operated by the ULB. Segregated waste from both households and commercial establishments are separated for resale at a single centralised processing centre, while the remaining waste is directly dumped into a landfill site without any processing. There was lack of clarity among ULB officials as to how these other types of wastes are being processed.5

<sup>&</sup>lt;sup>5</sup> Some officials mentioned that they are unscientifically dumped into the landfill, while others said that it was being handed over to authorised waste management vendors.

In Hosur, due to lack of an UGD system, a majority of buildings discharge their black water to individual septic tanks; from here, the floating liquid effluents are further discharged to a nearby open drain while the faecal sludge that settles down in the pit is removed from suction machines and dumped in open/agriculture lands away from the city limits. Additional challenges include the pollution of ground water resources since about 40% of untreated sewage from Bengaluru gets discharged into the South Pennar river<sup>6</sup> that flows close to the city. In 2017, an improvement of the water supply distribution system under the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) programme was taken up at a cost of Rs 87.91 crore by

the Tamil Nadu Water Supply and Drainage Board (TWAD), a state-owned parastatal body, but the results are yet to be seen. Lately, some of the newer planned layouts that have come up in the outskirts of the city have a private UGD system facility connected to a STP that has been built exclusively for specific layouts. A Detailed Project Report (DPR) with a cost estimate of around Rs 525 crore was recently prepared by TWAD for implementing a UGD system. About 80% of the waste is being collected door to door and is segregated at the source itself, while the remaining 20% is dumped at various locations/black spots and gets segregated at the decentralised Micro Compost Centers (MCC<sup>7</sup>) by sanitary workers.



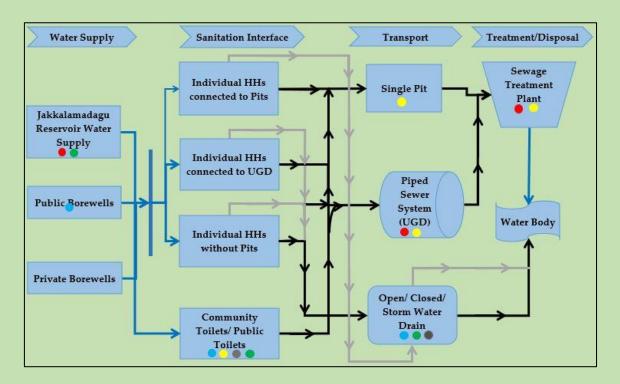


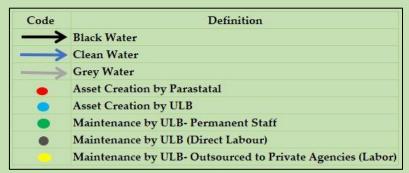
Source: Photograph taken by CBPS Team during field visit

<sup>&</sup>lt;sup>6</sup> https://www.deccanchronicle.com/151217/nationcurrent-affairs/article/40-cent-bengaluru-sewageflows-tamil-nadu.

<sup>&</sup>lt;sup>7</sup> There are 11 Micro Compost Centers.

Figure 1: Water Supply and Sanitation Ecosystem in Doddaballapura City Municipal Council, Karnataka



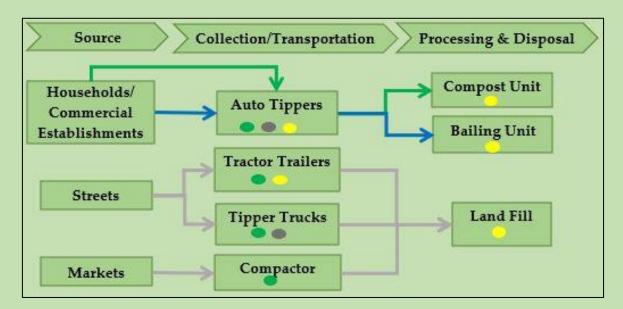


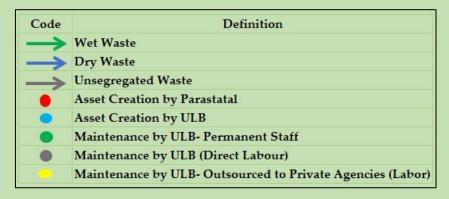
**Note:** Grey Water is water from kitchen and bathroom sinks, showers, tubs and washing machines. Black Water is Water from toilets that contains urine and faecal matter.



Source: Photograph taken by CBPS Team during field visit

Figure 2: Solid Waste Management Ecosystem of Doddaballapura City Municipal Council, Karnataka







**Source:** Photograph taken by CBPS Team during field visit

Treatment/Disposal Water Supply Sanitation Interface Transport Individual HHs Septic Tank Open land/ connected to Agriculture land Septic Tank Hognekkal Water Supply Project Individual HHs Open/Closed/ without Septic Storm Water Water Bodies Tanks Drain Public Borewells /Water Tanks Community Toilets/ Public Sewage Toilets Treatment Plant Private Borewells Piped Sewer Individual HHs System Re-use in in Private Layout (UGD) private layout

Figure 3: Water Supply and Sanitation Ecosystem in Hosur City Municipal Corporation, Tamil Nadu

Code	Definition						
_	Black Water						
$\longrightarrow$	Clean Water						
->	Grey Water						
>	Effluent						
•	Asset Creation by Parastatal						
•	Asset Creation by ULB						
•	Maintenance by ULB - Permanent Staff						
	Maintenance by ULB - Outsourced to Private Agencies (Labour)						
	Maintenance by Private Agencies (Service)						

**Note:** Grey Water is water from kitchen and bathroom sinks, showers, tubs and washing machines. Black Water is Water from toilets that contains urine and faecal matter.



Source: HCMC

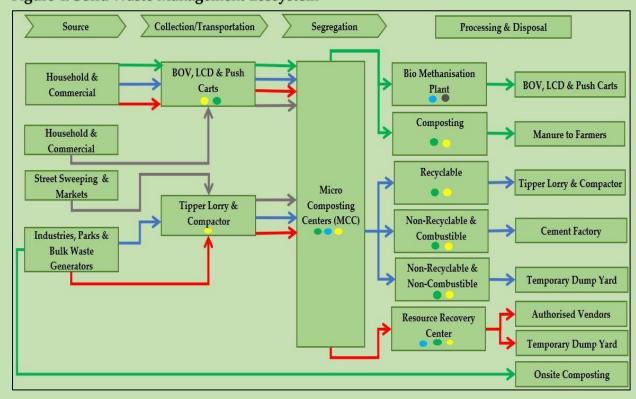
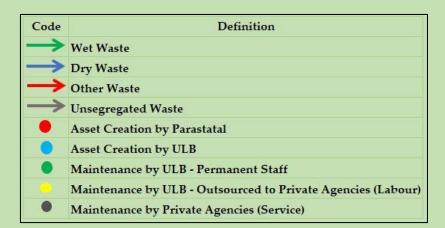


Figure 4: Solid Waste Management Ecosystem



**Note:** Other Waste is Hazardous Waste, E-Waste, C & D Waste and Inert Waste. **Source:** Compiled by team at Centre for Budget and Policy Studies.

3. "Hazardous" work outsourced to private agencies with insecure contracts for workers and "unrecognized" manual scavenging present.

There are four different modes of employing Sanitation/SWM workers in Doddaballapura ULB—permanent staff, direct labour, outsourced to private agencies (labour), and outsourced to private agencies (service). The term

"Direct Labour" refers to sanitation/SWM workers employed by the ULB without any formal contract and on a daily wage basis. All sanitation work that is typically classified as "hazardous", such as the maintenance of UGD and STP and the desludging of household pits, has been outsourced to private agencies by the Doddaballapura CMC. The compensation and benefits for workers either employed

as direct labour or outsourced from private agencies is not on par with those working as permanent staff of the ULB. Workers belonging to both these categories are paid a fixed remuneration irrespective of the number of years of experience.

At present, there are not any officially recognised manual scavengers working within Doddaballapura CMC limits. During a survey carried out in 2013, seven manual scavengers were identified by the ULB to receive benefits under the SRMS. However, till date, only two out of the seven identified manual scavengers have been provided housing under the SRMS scheme. After the 2013 survey, two additional surveys were conducted in 2018 and 2019, but no new manual scavengers were identified although, in 2016, four people died of asphyxiation in a manhole while trying to unclog a blockage in the UGD. During our field work, a few sanitation workers informed us that they continue to clear faecal matter that clogs open drains within the old city limits or in the STP but are not recognised as manual scavengers. According to the ULB officials, only if a person touches faecal matter with their bare hands can the activity be considered as manual scavenging, while cleaning and carrying faecal matter with proper safety gears such as gloves and shovels is not. Similarly, for the past three years, Hosur

CMC has not officially identified any manual scavengers. However, since a vast majority of the households are not connected to a UGD network, the sanitation workers who de-sludge septic tanks and work under registered private agencies may also come in direct contact with faecal sludge. However, here also, only if an individual gets inside a manhole/drain and touches faecal matter with their bare hands is the activity defined as manual scavenging.

There are three different modes of employing sanitation/SWM workers in Hosur CMC—permanent staff, outsourced to private agencies (labour), and outsourced to private agencies (service). The strength of workers outsourced from private agencies is almost three times more as compared to the number of workers hired as permanent staff of the ULB. The outsourced workers are paid less than the permanent staff; hence, it results in a lower financial burden to the CMC. While Hosur CMC is entitled to engage 1,2508 permanent sanitation/SWM workers, only 250 are sanctioned and only 179 were in position at the time of the fieldwork9. Hosur CMC has also outsourced 520 additional workers from private agencies, who are largely involved in door-to-door garbage collection and segregating waste. While the permanent staff receive high salaries commensurate with their work experience along with

<sup>&</sup>lt;sup>8</sup> GO Ms. No. 101. dated 30 April 1997.

<sup>&</sup>lt;sup>9</sup> Currently, 148 permanent workers are working as sanitation workers. The remaining 31 permanent workers are divided in the following manner—25 workers are diverted to water supply and 6 workers are involved in office cleaning.

annual increments, the wages for outsourced workers are fixed and quite low for performing the same type of sanitation/SWM work. Unlike children of permanent staff, these workers' children are not entitled for any skill-based training. However, there is an incentive-based system wherein the revenue generated from the sale of recyclable plastic waste is shared among all workers involved in garbage collection and segregation work irrespective of their mode of employment.

#### B. Urban Local Bodies' Finances

1. State governments control the nature and rates of revenue, while ULBs are responsible for collection efforts.

The municipalities in Karnataka are governed by the Karnataka Municipalities Act 1964, Karnataka Municipal Corporation Act 1976. The accounts of the municipalities are maintained as per the Karnataka Municipal Accounting and Budgeting Rules 2006 (KMABR-2006)<sup>10</sup> on the lines of National Municipal Accounting Manual. The important sources of revenues of an ULB in Karnataka include the grants as recommended by the SFC (and accepted with or without changes by state government), both in the form of tied (specific purpose) and untied grants, Own Source Revenues (OSR), and assigned

The municipalities in TN are governed by the Districts Municipalities Act 1920, Municipal Corporation Act. The accounts of the municipalities are maintained as per the Tamil Nadu Municipal Accounting Manual (MAM)<sup>11</sup> on the lines of National Municipal Accounting Manual. The important sources of revenues of an ULB in TN are similar to Karnataka and include transfers from state government both in the form of tied (specific purpose) and untied grants, Own Source Revenues (OSR) and assigned revenues. The key OSR in TN include the property tax- general, water supply and drainage tax, and elementary education tax. The other important tax sources include professional tax, advertisement tax, and tax on carriage and animals. The important fees include metered/tap water charges, trade license fees, market fees, slaughterhouse fees, parking fees, and fees for pay and use toilets.

The assigned revenue is the surcharge on stamp duty levied for the registration of properties in the jurisdiction of the ULB in

revenues. Own Source Revenues include property tax, advertisement tax, water supply charges, solid waste management cess, and trade license fees. These are collected by the ULB, while the rates are stipulated by the state government. The trade license fee is stipulated to be revised every three years by the ULBs.

<sup>&</sup>lt;sup>10</sup> This also stipulates double entry accrual-based accounting system.

<sup>&</sup>lt;sup>11</sup> https://www.tnurbantree.tn.gov.in/wp-content/uploads/2020/10/Municipal-Account-Manual.pdf. This also stipulates double entry accrual-based accounting system.

both the states. The state collects on behalf of the ULB and shares it with the ULB. In TN, entertainment tax is also collected by the state and transferred to the ULB. However, this transfer is usually delayed and the ULB in both the states have no clue about its size till it gets it. In both these states, all taxes that are a part of OSR are collected by the ULB, while the rates are stipulated by the state government.

Both in Karnataka and TN, ULB are expected to collect the SWM cess at the rates prescribed by the state government along with the property tax. The SWM cess are fixed based on the nature (residential or commercial), area of the buildings, and the category of the municipalities.

The Doddaballapura CMC charges an annual SWM cess of Rs 540 per household and Rs 3,000 for commercial establishments. It also collects a one-time UGD connection fee ranging from Rs 2,500 to Rs 5,000 to provide connection to the sewer network. The Hosur CMC charges an annual SWM cess of Rs 365 per household and Rs 1,200 for a commercial establishment. In TN, the grants from state government, usually referred to as SFC grants or Devolution fund, come in the untied form.

The other grants include Central Finance Commission (CFC) grants and the grants for capital works or capital grants. Tamil Nadu municipal budgets are to be prepared on the lines of the Municipal Budget Manual<sup>12</sup> both in abstract (Appendix VI) and detailed form (Appendix VII). However, the budgets of the Hosur CMC were not prepared in the prescribed manner. The financial status of the ULB has been analysed using the audited statements for the year 2014-15 to 2018-19, which had Income-Expenditure statements and Trial Balance sheets<sup>13</sup>.

## 2. Slow growth in revenue receipts but high growth in the share of OSR in Doddaballapura, Karnataka.

The receipts of the CMC include OSR, grants (specific and untied), and extra-ordinary receipts. The extraordinary receipts of the CMC include those that are temporarily held by the CMC to be paid later<sup>14</sup>. The share of OSR increased from 25% of total revenues in 2014-15 to 37% in 2019-20. The average share of the OSR and grants in the total revenues for the period 2014-15 to 2019-20 stood at 32% and 59%, respectively, indicating a higher dependency of the ULB on the grant receipts.

http://117.202.8.226/SSII DOCUMENTS/MUNICIP AL BUDGET MANUAL TNUDPIII.pdf

http://www.tnbudget.tn.gov.in/tnweb files/SFC/5th %20SFC%20REPORT.pdf (page 163- extraction of actual receipts and charges code wise is not possible with the existing software)

<sup>14</sup> These include EMD, security deposits, deductions pertaining to GST, royalty, income tax, cesses payable to the respective authorities and recoveries of loans or advances to employees. Similarly, the extraordinary payments include the refund of EMDs, security deposits, cesses paid to authorities, deductions paid to authorities and advances for employees. These extraordinary receipts and payments need to be excluded to arrive at the true picture of the finances of ULBs.

<sup>12</sup> 

The revenues of the Doddaballapura CMC<sup>15</sup> have grown significantly over the period 2014-15 to 2019-20, from Rs 1,792 lakhs to Rs 2,695 lakhs, recording an average growth of 13% on a year-on-year basis (Table 2). The grants, both tied and untied together, forms an important source of revenue, which accounts for 65% of the total revenues,<sup>16</sup> indicating the dependency on the transfers from the state. This is followed

by property tax revenues, which accounts for 15%. Other revenues, which include rent from buildings, market fees, and water supply charges, form about 16% of the total revenues of the ULB. The CFC grants and untied SFC grants together account for 33% of the average revenues of the ULB. The sanitation related revenues accounted for less than 1% of the revenues of the Doddaballapura CMC.

Table 2: Revenues of Doddaballapura City Municipal Council (Rs in Lakhs) and their share (%)

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 RE	AVE	Share
Property tax	237.82	288.13	303.54	350.53	411.53	513.10	350.77	15%
Assigned Revenues	0.00	0.00	7.48	22.50	18.01	10.00	9.66	0%
Sanitation and SWM related	12.05	83.28	72.06	54.00	77.59	72.75	61.96	3%
Other own revenues	259.44	380.79	354.06	374.16	306.76	481.16	359.39	16%
CFC grants	242.86	292.03	267.32	228.42	267.95	417.09	285.95	12%
SFC grants untied	302.90	438.29	183.03	198.15	188.71	200.00	251.85	11%
Tied grants	737.10	1449.14	1085.46	888.77	718.32	1001.19	980.00	43%
Total	1792.17	2931.66	2272.94	2116.54	1988.85	2695.29	2299.58	

**Note:** SWM stands for Solid Waste Management, CFC stands for Central Finance Commission, SFC stands for State Finance Commission, and RE stands for revised estimates.

<sup>&</sup>lt;sup>15</sup> Excluding extraordinary receipts - include EMD, security deposits, deductions pertaining to GST, royalty, income tax, cesses payable to the respective authorities and recoveries of loans or advances to employees.

<sup>&</sup>lt;sup>16</sup> The average share of grants reduces to 59% if the extraordinary receipts are also considered.

3. Low payment for outsourced and temporary labour, and poor collection of user charges under SWM management in Doddaballapura, Karnataka.

The expenditure of Doddaballapura CMC<sup>17</sup> increased from Rs 15,00 lakhs in

2014-15 to Rs 2,337 lakhs in 2019-20 (Table 3). The average share of revenue and capital expenditure for the period 2014-15 to 2019-20 stood at 64% and 36%, respectively. The expenditure on sanitation and SWM together averaged at about 34% of the total expenditure.

Table 3: Expenditures of Doddaballapura City Municipal Council (Rs in Lakhs) and their share (%)

Expenditure	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20 RE	AVE	Share
Revenue Expenditure	1003.70	1328.16	1214.43	1510.29	1323.32	1841.15	1370.18	64%
Capital Expenditure	496.92	786.43	717.90	949.04	1132.23	496.20	763.12	36%
Total Expenditure	1500.62	2114.59	1932.33	2459.33	2455.55	2337.35	2133.30	
Sanitation & SWM Expenditure	446.76	730.60	673.02	858.99	806.68	800.87	719.49	
Share of Sanitation & Solid Waste Management	30%	35%	35%	35%	33%	34%	34%	

The SWM and sanitation management are being done together by the public health section and engineering section. The expenditure on sanitation includes the construction and maintenance of sewer systems, sewerage treatment plants, public toilets and roadside drains. This includes the expenditure on salaries of permanent staff, wages for contract/outsourced work, fuel charges, protective gears for sanitary workers,

The expenditure on salaries of permanent staff and wages of sanitary workers

consumables and expenditure on capital works. The expenditure on SWM includes door to door collection of waste, segregation of waste, maintenance of segregation site, MSW processing unit, bio mining and land fill site. The O&M expenditure include fuel charges, protective gears, consumables and repairs of vehicles meant for SWM.

<sup>&</sup>lt;sup>17</sup> Excluding extraordinary expenditure- include the refund of EMDs, security deposits, cesses paid to authorities, deductions paid to authorities and advances for employees.

involved in SWM and sanitation activities together accounted for 41% of the expenditure on sanitation and SWM (Table 4) while the O&M expenses and capital expenditure accounted for 28% and 31% of total sanitation and SWM expenditure, respectively. The receipts

from sanitation include SWM cess, sale of recyclable materials, scrap, sale of compost, UGD connection fee and sucking machine charges. The receipts accounted for an average of 12% of the revenue expenditure of sanitation and SWM together.

Table 4: Expenditure and Receipts of Doddaballapura City Municipal Council from Sanitation and Solid Waste Management (SWM) (Rs in lakhs)

	2014- 15	2015- 16	2016- 17	2017- 18	2018- 19	2019-20 RE	AVE	Share
1. Operation and Maintenance	89.77	159.63	231.82	370.21	126.60	222.97	200.17	28%
2. Wages	31.79	43.16	52.19	35.99	56.97	176.00	66.02	9%
3. Salaries	201.18	218.83	207.49	191.74	285.02	281.76	231.00	32%
4. Capital	124.03	308.99	181.51	261.05	338.09	120.14	222.30	31%
5. Total Exp	446.76	730.60	673.02	858.99	806.68	800.87	719.49	
6. Revenue exp (1+2+3)	322.73	421.62	491.51	597.94	468.59	680.73	497.19	
7. Receipts from Sanitation and SWM	12.05	83.28	72.06	54	77.59	72.75	61.96	
Share of receipts in Revenue Expenditure (7/6*100)	4%	20%	15%	9%	17%	11%	12%	

The salaries of permanent staff accounted for 32% of the total expenditure on sanitation and SWM while the wages accounted for mere 9% of the total expenditure on sanitation and SWM. Of the total 174 sanitation and SWM frontline workers, 74 were permanent workers while the other 100 were outsourced staff/ direct labour accounting for 43% and 57% respectively. However, if the wages and salaries are considered together, the wages of contract labour and outsourced staff together accounted for mere 20% of the total wage bill while the salaries of permanent staff accounted

for 80% of the wage bill. This shows the huge disparity in salaries which varies depending upon the mode of employment even though they are all performing the same sanitation/SWM task.

## 4. High growth in revenue coupled with high dependency on the state government in Hosur, Tamil Nadu.

The revenues of the Hosur CMC have grown significantly over the period 2014-15 to 2018-19 from Rs 6,501 lakhs to Rs 11,905.43 lakhs recording an average growth of 21% on a year-on-year basis

(Table 5). The devolution fund forms the important source of revenue, which accounts for 30% of the revenue, followed by own tax revenues, which account for 25%. Other revenues, which include rent from buildings, interest from investments, market fees, water supply charges and fines, form about 21% of the total revenues of the ULB. The CFC grants and capital

grants accounted for 7% and 13% of the total revenues, respectively. The devolution fund, CFC grants, and capital grants together account for 50% of the average revenues of the ULB indicating the dependency on the transfers from the state. The sanitation related revenues accounted for mere 1% of the revenues of the Hosur CMC.

Table 5: Revenues of Hosur City Municipal Corporation (Rs in Lakhs) and share (%)

Source of Revenues	2014-15 AC	2015-16 AC	2016-17 AC	2017-18 AC	2018-19 AC	AVE	Share
Own Tax	1,568.72	1,549.80	1,768.24	1,985.85	3,174.71	2,009.46	25%
Assigned Revenues	254.34	281.45	295.71	253.75	380.48	293.14	4%
Central Finance Commission grants	39.03	701.20	319.25	957.75	600.53	523.55	7%
Grants from the State Government	1,739.69	314.25	1,234.90	546.84	1,286.22	1,024.38	13%
Devolution Fund	1,992.37	2,278.55	2,162.88	2,771.04	2,667.14	2,374.40	30%
Sanitation related charges	35.93	39.83	39.14	51.48	303.55	93.98	1%
Other revenues	871.07	1,088.06	1,080.16	1,751.53	3,492.82	1,656.73	21%
Total	6,501.15	6,253.14	6,900.28	8,318.23	11,905.43	7,975.65	

Note: AC stands for Accounts/Actuals.

# 5. Relatively higher recovery of sanitation and SWM Expenditure in Hosur CMC, Tamil Nadu.

The expenditure of Hosur CMC increased from Rs 4,767 lakhs in 2014-15 to Rs 8,919 lakhs in 2019-20 (Table 6). The average

share of revenue and capital expenditure for the period 2014-15 to 2019-20 stood at 47% and 53%, respectively.

The expenditure on sanitation and SWM together averaged at about 9% of the total expenditure.

Table 6: Expenditures of Hosur City Municipal Corporation (Rs in Lakhs) and their share (%)

	2014 -15 AC	2015- 16 AC	2016-17 AC	2017-18 AC	2018- 19 AC	AVE	Share
Revenue Expenditure	3,027	3,447	3,512	3,919	4,639	3,709	53%
Capital Expenditure	1,740	2,488	3,883	4,290	4,281	3,336	47%
Total Expenditure	4,767	5,934	7,395	8,209	8,919	7,045	
SWM and Sanitation	442.18	623.38	656.44	768.53	786.14	655.33	
Expenditure							
Share of SWM and	9%	11%	9%	9%	9%	9%	
Sanitation expenditure							

Note: SWM stands for Solid Waste Management, AC stands for Actuals/Accounts and AVE stands for Average.

The sanitation and SWM expenditures both under revenue and capital were added to arrive at the total sanitation/SWM expenditures of Hosur CMC. The revenue expenditures under sanitation included conservancy expenses, procurement of sanitary materials, maintenance of drainage systems, and SWM. The large part of it as conservancy expenses include the daily wages paid to the sanitary workers, who are about 175 in number. The sanitation expenditure increased from Rs 442.18 lakhs in 2014-15 to Rs 786.14 lakhs in 2018-19 (Table 7).

The sanitation, including SWM expenditure, accounted for average share of 9% of the total expenditure across the years 2014-15 to 2018-19. Residents of Hosur CMC do pay for desludging of the sanitary pits, which also forms part of the expenditure on sanitation and is entirely done by private agencies registered with the Hosur CMC. This accounts for about Rs 1.5–2 lakhs and works out to about Rs 18–24 lakhs per annum (current prices, 2020), which should also be added to the sanitation expenditure of the CMC.

Table 7: Sanitation expenditure in Hosur City Municipal Corporation (Rs in lakhs) and its share (%)

Expenditure Details	2014-15 AC	2015-16 AC	2016-17 AC	2017-18 AC	2018-19 AC	AVE	Share
1. Sanitation/SWM expenditure	145.59	229.94	262.57	431.60	515.01	316.94	48%
2. Personnel exp	64.04	65.75	78.77	97.44	121.61	85.52	13%
3. Capital Expenditure	232.56	327.68	315.09	239.49	149.51	252.87	39%
4.Total	442.18	623.38	656.44	768.53	786.14	655.33	
5. Total Expenditure	4766.83	5934.13	7395.04	8208.75	8919.45	7044.84	
6. Revenue exp sanitation& SWM (1+2)	209.62	295.69	341.35	529.04	636.63	402.47	

Expenditure Details	2014-15 AC	2015-16 AC	2016-17 AC	2017-18 AC	2018-19 AC	AVE	Share
7. Share of total expenditure	9%	11%	9%	9%	9%	9%	
8. Receipts from Sanitation and SWM	35.93	39.83	39.14	51.48	303.55	93.98	
9. Receipts from sanitation and SWM as % of Revenue expenditure on sanitation ([col 8/col6] *100)	17%	13%	11%	10%	48%	20%	

Note: SWM stands for Solid Waste Management, AC stands for Accounts/Actuals and AVE stands for Average.

The revenues raised through the charges levied for sanitation collected by the Hosur CMC accounted for 13% of the O&M costs incurred for sanitation and SWM services during the year 2014-15 to 2017-18 (Table 7). During the year 2018-19, owing to the increased collection of SWM cess due to revised rates of property taxes, the sanitation expenditure was covered by the receipts to the tune of 48%.

# 3. IMPLICATIONS OF THE 15TH FINANCE COMMISSION (FC) RECOMMENDATIONS FOR THE SANITATION AND SOLID WASTE MANAGEMENT SERVICES IN ULBs

## 3.1 Performance based allocations for local governments

The 15th FC recommended grants of Rs 4,36,361 crore for local governments for the five-year period 2021-26. It also has advocated for a fixed amount of grants for local governments rather than a

proportion of the divisible pool of taxes to ensure greater predictability of the quantum and timing of fund flow. Of the total grants recommended for local governments, Rs 8,000 crore are earmarked for performance-based grants for incubation of new cities, Rs 450 crore for shared municipal services, and Rs 70,051 crore for primary health sector (balance amount is Rs 3,57,860 crore).

The performance-based grant is linked to improving their service level benchmarks on urban drinking water supply, sanitation, and SWM, on attainment of star ratings as developed by the Ministry of Housing and Urban Affairs (MoHUA). This includes management and treatment of household waste, in particular human excreta and faecal sludge and movement, towards more innovative and environment-friendly ways to tackle this problem. This grant, however, through this rating for its performance, may be too small to induce the change to the lessendowed ULBs. Implementation of the same could also pose severe challenges.

The 15th FC also recommended state-specific grants-in-aid of Rs 49,599 crore to help states meet special burdens or obligations of national concern across six broad areas, including conservation and sustainable use of water, drainage, and sanitation. From this grant amount, around Rs 2,200 crore are planned to be allocated exclusively for drainage, sanitation, and SWM infrastructure by the states of Kerala, Manipur, Odisha, Tripura, Uttar Pradesh and Uttarakhand.

# 3.2 Need for more realistic estimation of SWM costs and ways for augmenting the revenues of ULBs

The current costs of managing SWM and sanitation in most ULBs are a severe underestimate. This is because fewer people are employed for it than the actual requirement (vacancies are not filled) and often, it is outsourced or hired labour (on a daily wage/monthly wage basis); thus, the costs incurred are far less than the actual costs that would be involved for permanent posts. Similarly, the consumables and the protective gears are also not procured as per requirements but guided by the availability of funds. Processes such as segregation and treatment of different kinds of waste under SWM leading up to less than or equal to 1% of waste for the landfill are often reduced to fit to finances of the ULB.

The most comprehensive way for addressing the sanitation and SWM issues

would be to assess the O&M costs required for the scientific management of sanitation and SWM in its entirety and recover the same. And this is the best possible way to address the welfare issues of the sanitary workers. Unless the services are costed fully and O&M costs are recovered, the plight of sanitary workers can hardly be changed for the better. The Finance Commission could also have focused on the need for funding the sanitation and SWM in its entirety as well as the requirement of O& M costs recovery in the light of environmental concern and efficient resource management. It is also important that the under recovery would impact the very provisioning of services in an efficient manner in the long run.

The increase of professional tax, even if it is adjusted to inflation, would definitely augment revenues of ULB in a significant manner, wherever it is vested with them like in the case of TN. The property tax floor rates in line with the Gross State Domestic Product (GSDP) growth is a good measure which are also recommended by State Finance Commission as well<sup>18</sup>. The 15<sup>th</sup> FC has recommended for enhancing the limit of professions tax from the present, Rs 2,500 per annum (which is levied as per the Constitution Sixtieth Amendment Act, 1988). In some states, the tax is levied and collected by the state, but in others, municipal bodies levy and collect the tax under a state legislation (e.g., TN). Even

by correcting for inflation, Rs 2,500 fixed in 1988 works out to around Rs 18,000 per annum at 2019-20 prices. The **professions tax collections (by ULBs) have the potential to grow by more than seven times** with the same number of assesses just by rationalising rates. The 15th FC has recommended **an additional entry level** 

condition for receiving grants by the ULBs, which is the notification of minimum floor rates<sup>19</sup> of property taxes by the relevant state government followed by consistent improvement in the collection of property taxes in tandem with the simple average growth rate of the state's own GSDP in the most recent five years.



Source: HCMC.



**Source:** Photograph taken by CBPS Team during field visit.

<sup>&</sup>lt;sup>19</sup> The minimum floor rate shall have different slabwise property tax rates for different types of properties, and differential rates for commercial, residential, and industrial properties.

## 4. KEY TAKEAWAYS AND POLICY IMPLICATIONS

Management of urban waste (including both sanitation and solid waste) is one of the important urban services that have been vested with the ULBs. Creation of capital assets pertaining to SWM and sanitation, such as installation of sewer systems/ faecal sludge management systems, bio-methanation plants, and waste processing units, have largely been undertaken through funds from the state government. This could be in the form of loan/grant. The property tax rates, the water charges, and SWM cess rates are prescribed by the state governments and the ULBs are expected to augment the taxes by improving the efficiency in tax collection and updating the tax base. Devolution in the form of grants/devolution fund form major portion of the revenue to the ULB apart from grants for creation of capital assets. Assigned revenues are due to ULB and transferred by the state but ULBs get to know its size only after it is received<sup>20</sup>. The devolution fund/grants due to ULB often gets intercepted and diverted to parastatals, and ULB may not be aware of it unless it is informed of the same.

Taking account of these issues, we have the following suggestions for reforming the ULP governance and finances including staffing:

## 4.1 Staffing and Welfare of Sanitation/SWM workers: ensure justice for all.

It is important that sanitary workers under different employment arrangements be made available the same type of health benefits, including life insurance cover. This is also required to ensure smooth working environment at the ULB level. To address the disparity in benefits and work burden (hazardous work such as at the STP), the ideal solution is to make only one type of employment of sanitary workers with uniform benefits (monetary, insurance, and healthcare) to all the workers, including the welfare schemes. Creation of a welfare fund that can be accessed by all types of SWM workers can be created. All sanitary workers should be involved in different activities of sanitation and SWM by rotation. The number of people employed should be prescribed in proportion to the population of the ULB, and ULBs should be empowered to change the number of people employed as per the requirement.

# 4.2 Manual Scavenging: clear definition and definite accountability.

Officials in ULBs do not seem to have a clear understanding of what defines and constitutes manual scavenging and were found to have a narrow and varied understanding of the 2013 Manual

<sup>&</sup>lt;sup>20</sup> Entertainment tax was devolved for 2014-15 and 2017-18, while it was not received during the years 2015-16 and 2016-17 in Hosur City Municipal Corporation.

Scavenging Act. Sanitation workers regularly unclog open drains using shovels but often without any protective gear. Since many households discharge their black water directly into these open drains, workers are exposed to waste that contains faecal matter. However, this is not considered as a manual scavenging activity by the ULB officials. They also suppressed the prevalence of unsafe sanitation practices and were reluctant to acknowledge any incidents/deaths due to manual scavenging.

Defining manual scavenging clearly and making the ULB officials aware of this definition is the first step towards addressing the issue of manual scavenging. The safe sanitary practices to be adopted by the ULB needs to be enforced in a strict manner to address the issues of manual scavenging, and this requires constant supervision, vigilance, and clear accountability measures for those responsible for continued manual scavenging practices.

#### 4.3 Data Management and Transparency in ULB Finances.

The data on devolutions, assigned revenues, and grants from union finance commission should be made available in public domain through a separate supplementary volume of the budget. Further, the information on the interception of funds meant for ULBs and its diversion also needs to become very transparent so that ULBs are aware of what proportion of funds meant to them reached in a financial year.

Data management relating to the own source revenue augmentation at the ULBs such as updating the assessment lists, periodical renewal of the lease contracts and rental agreements, proper assessments of the fees, and collection efficiency needs a serious introspection. Data management regarding core services also has to improve for assessment of requirements, planning, and interaction with the state. Data management can improve only when it is put to use. This requires a comprehensive capacity building plan for ULBs, focusing on better data management and data driven decision making.

#### 4.4 Governance Structure: empower ULBs and remove duality.

Due to lack of technical and financial capacities of ULBs, parastatal agencies have been entrusted with the responsibility of creating capital assets, while ULBs have been restricted only to the O&M of these assets. However, these parastatal agencies are only accountable to the state government and not to the ULB. One of the ways to get rid of this duality is to empower ULBs by providing technical personnel who are directly accountable to ULB with clear linkages with the state administration. The lack of capacity of the ULB as a reason for shifting the responsibilities to the parastatal needs to be eliminated by taking desired measures for capacity enhancement.

## 4.5 Municipal Finances: capacity building of ULBs for better accounts management.

Formulation of realistic budgets is the first step in the improvement of financial management at the ULBs.

The bookkeeping followed by accounting and updating of the registers pertaining to details of revenue receipts and expenditure needs improvement. Realistic estimations of revenues followed by improvement in the collection efficiency can lead to improved collections.

The observations from the audit report need to be addressed comprehensively to

The observations from the audit report need to be addressed comprehensively to achieve the objective of realistic budgets and data driven decision making.

Capacity building of ULBs through measures of appointing adequate staff and also training would help in better financial management.

4.6 Other larger implication: recognise ULBs as third layer of government and empower them through creation of appropriate institutional and transparency measures.

While the observations and findings seem to be pointing towards the ULB for its

performance, the underpinning seems to be of the responsibility of the state as well for the affairs of the ULB. Empowering ULBs to function as the local government in the true sense would be the best possible action. This would mean a greater transparency in devolution of funds to the ULBs, interception of funds meant for ULBs, along with ensuring the adequate staff for ULBs. This also means a platform for ULBs to interact with the state needs to be created, where representatives of ULBs have an opportunity to discuss issues relating to their performances.

Urban local bodies (ULBs) should be able to recover O&M costs of the services by convincing the people of the costs along with the possible impact on poor recoveries which only an empowered ULB can do<sup>21</sup>. Only when a ULB succeeds in provisioning the basic services with full recovery of O&M costs, issues of the welfare of the sanitary workers would get comprehensively addressed. All capacity building and transparent funding issues of ULBs point towards the aspect of empowering the local self-government, which is a highly political issue.

<sup>&</sup>lt;sup>21</sup> This phenomenon is witnessed in several gram panchayats and water user associations as well.



**Source:** Photograph taken by CBPS Team during field visit.



Source: HCMC.

27 - An institutional mapping of Urban Local Bodies through the lens of Sa	nitation and Solid Waste Management Services

